Message

From: Deegan, Dave [Deegan.Dave@epa.gov]

Sent: 12/1/2020 4:40:05 PM

To: R1 Executives All [R1ExecutivesALL@epa.gov]
Subject: FW: Daily News Clips: Morning Edition, 12/1/20

From: Kibilov, Nicholas

Sent: Tuesday, December 1, 2020 11:40:02 AM (UTC-05:00) Eastern Time (US & Canada)

To: AO OPA OMR CLIPS

Subject: Daily News Clips: Morning Edition, 12/1/20

Daily News Clips: December 1, 2020 (morning edition)

Agriculture

SF Successful Farming: EPA LATE IN SETTING ETHANOL MANDATE FOR 2021

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arsTechnica: Aftermarket truck mods pollute as much as 9 million extra pickups

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Chemicals

BostonGlobe: Toxic 'forever chemicals' found in pesticide used on millions of Mass, acres when spraying for mosquitos

ChemicalWeek: US EPA finds that glyphosate may affect endangered species

Water

Politico: Write this down: EPA laid out an interim plan for addressing discharges of PFAS

EPA LATE IN SETTING ETHANOL MANDATE FOR 2021

https://www.agriculture.com/news/business/cpa-late-in-setting-ethanol-mandate-for-2021

By Chuck Abbott

12/1/2020

Despite entreaties from ethanol makers and farm groups, the EPA missed the statutory deadline on Monday to finalize the Renewable Fuel Standard, which assures a share of the gasoline market for biofuels such as corn ethanol, for 2021. EPA administrator Andrew Wheeler has pointed to the steep decline in gasoline sales during the pandemic and said it was difficult to forecast demand in the new year.

Ordinarily, the EPA proposes in July the RFS for the coming year with an eye to issuing the final version by Nov. 30. The EPA did not propose a 2021 RFS during the summer. It did not make an RFS announcement on Monday. The statutory target for corn ethanol consumption is 15 billion gallons a year.

"At this point, it likely makes more sense to let the new administration handle the 2021 RVO (renewable volume obligation) rule-making process entirely," said Geoff Cooper, head of the trade group Renewable Fuels Association. President-elect Biden has been critical of waivers by EPA that exempt small refiners from complying with the RFS. "Thus, we are confident that the new EPA administrator, whoever it may end up being, will stop doing secret favors for oil refiners and ensure the RFS is implemented in a way that is consistent with the law and congressional intent," said Cooper.

The ethanol industry says the small-refinery waivers cumulatively reduced ethanol demand by 4 billion gallons over the years. The oil industry says the RFS is a costly burden and the gasoline market is saturated at the traditional 10 percent blend of ethanol into fuel for cars and light trucks.

Although the EPA did not act on the ethanol mandate for 2021, it has set the biodiesel mandate at 2.43 billion gallons for the new year. That's because the biodiesel mandate is set two years in advance.

In a statement, Cooper said the Biden administration, which takes office on Jan. 20, might need a few months to draft and finalize an RFS, "but in the meantime the statute is crystal clear that refiners must blend at least 15 billion gallons of conventional renewable fuel in 2021."

Air pollution spikes linked to lower test scores for Salt Lake County third graders

https://www.newswise.com/articles/air-pollution-spikes-linked-to-lower-test-scores-for-salt-lake-county-third-graders

1-Dec-2020 8:35 AM EST, by University of Utah

Mullen at al. (2020) Int. Journal of Enviro Res and Public Health
Three maps depicting (A) school disadvantage (B) chronic PM2.5 pollution (C) and the frequency of peak
PM2.5 pollution (C) at Salt Lake County schools in the study.

PreviousNext

Fine particulate matter (PM2.5), the tiny particles responsible for hazy air pollution, are detrimental to children's health even inside the classroom. Mounting evidence has linked chronic exposure with poor academic performance in K-12 students. Until now, no research had examined the impact of "peak" air pollution events, the 24-hour spikes of extremely high PM2.5 levels. For students in Salt Lake County, Utah, these episodes are a dangerous reality—the county's largest city, Salt Lake City, was among the top 10 most polluted American cities for short-term particle pollution in the latest American Lung Association report.

In a new <u>study</u>, University of Utah researchers found that more frequent peak air pollution exposure was associated with reduced math and English language arts (ELA) test scores for third graders in all primary public schools in Salt Lake County during the 2016-2017 year. The minimum peak pollution levels in this study are below what the U.S. Environmental Protection Agency (EPA) determines are "safe" levels of PM2.5. The results stress the need for legislators to enact policies that reduce the number of peak pollution days, and to advocate for lower federal pollution standards.

"The huge takeaway is that this isn't about school location—it's not just the schools in the most polluted parts of the city. Everyone is impacted by peak pollution," said lead author Casey Mullen, doctoral student in sociology at the University of Utah.

The study highlights the environmental injustice of Salt Lake County's air pollution problem— schools with a higher proportion of students of color and from households experiencing poverty were exposed to higher mean concentrations of fine particulates and more peak pollution days than were schools serving middle- to upper-class and predominately white students. Though peak exposures had a stronger effect on lower math proficiency in more socially advantaged schools.

"There are so many studies showing us that air pollution damages our brain's cognitive processing ability," said co-author Sara Grineski, professor of sociology at the University of Utah. "Utah has made great strides to lower pollution in the past decades, but we need to keep pushing forward policies to reduce pollution. We already know it will improve Utahns respiratory health, but it also can help kids do a little bit better in schools."

The <u>paper</u> published online on Sept. 22, 2020, in the International Journal of Environmental Research and Public Health. This research was funded by the Interdisciplinary Exchange for Utah Science at the University of Utah.

Air quality impacts test scores

The researchers looked at the Student Assessment of Growth and Excellence (SAGE) math and ELA scores of third graders in 156 primary public schools in Salt Lake County in 2017. They focused on the percentage of students whose scores were lower than grade-level expectations.

In order to ensure that air pollution was the only variable affecting test scores, the researchers created a school disadvantage variable that took into account Title I school status; Hispanic students; the percentage of non-Hispanic minority students who were Black, Asian/Pacific Islander or Native American/Alaska Native; and the percentage of students on free and/or reduce-priced meals. They also accounted for the school's neighborhood context.

"It is important to account for social disadvantage since social factors are tightly linked with standardized test scores. Students from low-income families have additional struggles that don't tend to affect more affluent students, such as food insecurity. Students from racial/ethnic minority backgrounds often have unequal educational experiences in the U.S. In some cases, they are immigrants themselves or the children of immigrants, and they might still be learning English," said Grineski. "These factors influence standardized test scores."

Then, they evaluated each school's chronic and peak air pollution concentrations. For chronic air pollution levels, they analyzed the daily PM2.5concentrations for each school using daily concentrations in the census tract housing each school from the U.S. EPA's Downscaler data. On average, schools had chronic PM2.5 levels of just over 8 micrograms per cubic meter. To establish peak air pollution episodes, the researchers identified the number of days each school was exposed to PM2.5 levels in the 95th percentile of PM2.5 concentrations for the year, which was 23 micrograms per cubic meter. The U.S. EPA's unhealthy air standard is 35 micrograms per cubic meter.

While chronic pollution exposure was associated with lower test scores, the effect disappeared when researchers controlled for the social disadvantage factors. In contrast, the frequency of peak pollution exposure was associated with a higher percentage of students who tested below grade proficiency in math and ELA, even after controlling for social disadvantage.

Reduce air pollution

The authors suggest that legislators could advance public health initiatives that protect children's exposure to air pollution. The researchers have consulted with urban planners about creating cleaner air routes for children to move around their communities. For the future, the state could improve regulations that would prevent schools from being built in high pollution areas. For now, investing in better air filtration systems in classrooms could help mitigate the poor air quality already exists. In the face of growing evidence that even low PM2.5 concentrations does damage to the human body, legislators should advocate for lower federal air pollution standards.

"Here, with constant air quality issues throughout the seasons, we need to increase awareness about air pollution exposures," Mullen said. "This is a conversation everyone should be having—people need to be informed about what's at stake."

Other University of Utah scientists who contributed of the study include Timothy Collins of the Department of Geography/Environmental and Sustainability Studies and Daniel Mendoza of the Department of Atmospheric Sciences/City & Metropolitan Planning.

SPECIAL REPORT-U.S. air monitors routinely miss pollution - even refinery explosions

https://www.reuters.com/article/usa-pollution-airmonitors/special-report-u-s-air-monitors-routinely-miss-pollution-even-refinery-explosions-idUSL1N2IG21I

By Tim McLaughlin, Laila Kearney, Laura Sanicola

20 MIN READ

DECEMBER 1, 20207:02 AMUPDATED AN HOUR AGO

Dec 1 (Reuters) - When explosions ripped through a Philadelphia oil refinery last year, the shock waves knocked Felicia Menna's front door frame out of place. Then came the black smoke.

"My throat was closing shut," recalled Menna, who lives about a mile away. "My nostrils felt like they were on fire."

She went to an emergency room, where doctors put her on a vaporizer device to ease her breathing and treated her with intravenous Benadryl for allergic reactions, according to medical records she provided to Reuters. She was among several dozen people who sought treatment after the blast, according to a neighborhood group that tracked affected residents.

One of the explosions was so large that a National Weather Service satellite captured images of the fireball from space. Refinery owner Philadelphia Energy Solutions later told regulators that the blasts released nearly 700,000 pounds of hazardous chemicals, including butane, and about 3,200 pounds of hydrofluoric acid, which can cause fatal lung injury in high concentrations. The incident remains under investigation by the U.S. Chemical Safety Board.

Yet the federal air quality index (AQI) score for south Philadelphia showed that day as one of the year's cleanest, according to data from the U.S. Environmental Protection Agency (EPA). The score was based on readings from part of the federal network of air quality monitoring devices, which are operated by the city of Philadelphia with oversight from state regulators and the EPA. None recorded any significant pollution.

"To say there was no impact to air quality was crazy," said Peter DeCarlo, an environmental engineering professor at Johns Hopkins University who lived in Philadelphia at the time and studied the city's monitoring system.

The episode illustrates a much broader failure of the U.S. air-pollution monitoring system, according to a Reuters examination of data from the EPA and independent monitoring organizations, along with interviews with scientists and environmental researchers. The government network of 3,900 monitoring devices nationwide has routinely missed major toxic releases and day-to-day pollution dangers, the data show.

The network, for example, identified no risks from 10 of the biggest refinery explosions over the past decade, the Reuters review of EPA data shows, even as thousands of people were hospitalized and the refineries reported toxic emissions to regulators.

Reuters also reviewed data from 10 community-based air monitoring projects by residents worried that government air-quality assessments are inaccurate. Those efforts often revealed pollution spikes and hot spots the EPA network never captured.

About 120 million Americans live in counties that have no EPA pollution monitors at all for small particle pollution, according to agency data. That was the case when an oil refinery in Superior, Wisconsin exploded in 2018, causing a leak of 17,000 barrels of asphalt and blanketing Superior and neighboring Duluth, Minnesota in clouds of black smoke. Though Superior has Wisconsin's only refinery, the city of 27,000 people isn't big enough to require permanent government air-pollution monitors nearby, said a spokeswoman for the Wisconsin Department of Natural Resources, citing EPA guidelines.

Fine particles - measuring less than 2.5 microns - are far smaller than a grain of sand and are considered the most dangerous form of pollution because they penetrate the bloodstream and cause lung and heart disease. Major sources include power plant and industrial smoke stack emissions, as well as vehicle exhaust.

The system's failures pose a public health risk, independent scientists say. The monitors underpin the Air Quality Index that many Americans, including those with respiratory disease, rely on to determine whether the outdoor air is safe. Pollution detected - or missed - by the monitors also guides regulatory decisions on whether new or expanded industrial projects can be permitted under the National Ambient Air Quality Standard. If pollution in the area is below regulatory thresholds, the projects generally go forward.

The data also inform and justify environmental policy decisions - and have often been used by President Donald Trump to tout his environmental record. Trump has cut back on policies aimed at addressing climate change by limiting carbon emissions. In his losing re-election campaign, he referred to the AQI this year when he asserted that America has the world's cleanest air. A leading Yale University study, produced annually, ranks the nation 16th for air quality globally.

President-elect Joe Biden, a Democrat, has said he would step up prosecutions for illegal polluting; push for a worldwide ban on government subsidies for fossil fuels; tighten fuel economy standards for vehicles; and put limits on methane pollution from oil and gas facilities.

The EPA declined to comment on the monitors' performance during specific pollution events, including the refinery explosions examined by Reuters, but said the network was generally accurate and reliable. "We are confident that the monitoring network provides data that allows decision-makers - states, public health officials, etc. - to make informed decisions on public health" and the permitting of plants in polluting industries, the EPA said in a statement.

The EPA oversees the network of pollution-monitoring devices, which are maintained and operated by state and local environmental agencies, who also share the financial burden. With probes that suck in air, the devices use filters, light pulses and beta rays to detect gas and particle pollution so tiny that concentrations are measured in parts per billion.

Academics, along with current and former regulators, say the network's problems are many and varied: Monitors are sparsely and poorly placed; the program is underfunded; and the network is not equipped to meet current pollution threats. The monitoring program emerged piecemeal after the 1970 Clean Air Act, mainly to track acid rain, smog and ozone pollution. Those hazards have largely subsided, replaced by more localized threats including toxic compounds and particulate matter from a wide range of industry and natural hazards, such as wildfires.

Individual monitors have also proven inaccurate, often recording pollution levels that can vary wildly from audit monitors placed beside them, according to government quality-assurance audits. Nearly half of the country's monitors meant to capture fine particulate matter did not meet federal accuracy standards, an EPA audit released in 2015 found.

When explosions rocked the Philadelphia refinery, the closest monitor for hazardous chemicals was programmed to operate only one of every six days - and therefore missed the incident entirely, according to

EPA data reviewed by Reuters. Other Philadelphia monitors were either upwind or too far away to detect the explosion's pollution, according to the EPA data, which shows wind direction and speed. The refinery owner, Philadelphia Energy Solutions, filed for bankruptcy after the explosion and sold the property this year to a Chicago developer that plans to convert it to a mixed-use industrial park.

It wasn't the first time monitors programmed to operate sporadically missed pollution from a major explosion. When Chevron Corp's refinery in Richmond, California, caught fire in 2012, clouds of particulate matter forced 15,000 people to seek treatment, according to the U.S. Chemical Safety Board.

But the closest government monitor of hazardous chemicals recorded no problems because it was turned off. It had been programmed to work one of every 12 days, according to EPA data. The EPA and local regulators told Reuters that certain types of monitors are designed to operate only occasionally to reduce costs and labor. In 2013, Chevron agreed to pay \$2 million in fines and restitution after pleading no contest to six misdemeanor criminal charges in connection to the fire.

Monitors are also sometimes programmed to limit the level of pollution recorded. A government monitor in Imperial County, California, operated by local and state regulators, recorded much lower readings of day-to-day air pollution in 2017 than were actually occurring because it had been programmed to max out at a lower level. The EPA acknowledged the issue to community organizations after the groups discovered higher readings with their own monitors.

"It's almost unbelievable this can happen in the United States," said Michael Jerrett, chair of the environmental health science department at the University of California, Los Angeles, and an adviser on the community monitoring project.

Researchers from the University of California San Francisco did a post-mortem on the Chevron refinery fire as part of a community health study. They concluded many of the people who suffered initial health problems continued to have worsening health in the years after, including chronic respiratory issues such as asthma.

Chevron said in a statement that it has worked since the 2012 fire to improve safety, reduce pollution and provide the community real-time data on air quality around its refinery. "Chevron recognizes the value of complete and accurate air quality data," the company said.

In south Philadelphia, Menna said her initial symptoms from the blast's fallout wore off in about a week, but she continued to cough for six months.

"I still don't know if I have long-term effects," she said.

UNDERFUNDED SYSTEM

A study conducted in 2013 during the administration of President Barack Obama, a Democrat, detailed a number of problems with the U.S. air monitoring network. The report proposed improvements including boosting monitoring near major polluting infrastructure, sampling for more pollutants, and doing more urban field studies to better understand block-to-block variability in air quality. But the weaknesses largely remain today because neither the Obama nor the Trump administration invested more in the monitoring network.

Over the past five years, the number of government monitors nationally has declined by 4% as state and local environmental agencies cut spending, according to EPA figures. Federal grants to state and local air-quality agencies have not increased in 15 years, according to testimony earlier this year by the National Association of Clean Air Agencies, a nonpartisan group based in Arlington, Virginia.

"The public's desire for pollution data is exploding, but the government has less resources," said Lyle Chinkin, chief scientist at environmental research firm Sonoma Technology, who has testified for the EPA in lawsuits accusing coal plant operators of Clean Air Act violations.

The EPA said it has improved the system despite what it acknowledged was flat funding for the past decade. The agency said it has replaced some labor-intensive, manual monitors with automatic monitors that provide round-the-clock, real-time data. The continuous monitors cost less to operate, but can also be less reliable than manual monitors in measuring particulate matter, according to EPA quality control audits.

Local groups worried about air quality have been trying to fill the gaps.

A community project in New York City, for example, has deployed up to 150 air monitors over the past decade. It found small particle pollution from traffic has been 50% higher in low-income neighborhoods than wealthier ones because they tend to be closer to major thoroughfares. By contrast, the EPA network run by state regulators in New York City has less than 30 monitors, preventing the EPA from providing city neighborhoods with a granular view of air quality, said Holger Eisl, director of the community project.

In Imperial County, California, the predominantly Latino community had long suspected government monitors were not giving a true reading of local pollution from agricultural burning and factories across the border in Mexico. An organization called Comite Civico del Valle installed 40 of its own monitors in 2015 to compare against the handful of government monitors. The devices detected sky-high levels of coarse particle pollution, at times exceeding the worst days in Beijing, among the world's most polluted cities. Course particle pollution, produced by activities including wildfires and farming operations, can increase risk of heart and lung diseases.

The 24-hour maximum level of coarse particulate matter recorded by the community monitors surged as high as 2,430 micrograms per cubic meter in 2017, according to project organizers. That's 40 times greater than the World Health Organization's recommended level. The nearest government monitor, however, showed concentrations of only 985 micrograms per cubic meter, according to EPA data. Researchers discovered, after consulting with the EPA, that the government monitor had been programmed to record nothing higher than 985 micrograms.

"We exposed them many times by finding things the government monitors were not finding," said Luis Olmeda, executive director of Comite Civico del Valle.

The EPA acknowledged the monitors' default setting was capped. It said the manufacturer warned that using higher settings can impair readings of lower pollution levels. After learning of the high readings on the community monitors in Imperial County, state and county environmental officials adjusted the area's monitors to capture pollution levels up to 10,000 micrograms. The EPA detailed the change of settings in September when it ruled that the county's air had improved enough to comply with federal regulations on coarse particle pollution.

Overall, between October 2016 and February 2017, the community monitors detected 1,426 episodes of elevated levels of particulate matter, or 12 times what government monitors recorded. The EPA ruled in October that Imperial County meets clean air standards. The agency excluded nearly 100 days of excessive pollution between 2014 and 2018, saying sand and dust storms in the desert area were "exceptional events."

Community groups in Baltimore; Albany, New York; and East Oakland, California, have also independently found pollution missed by the EPA system. In Baltimore's Curtis Bay neighborhood, community monitors revealed 24% higher fine particle pollution than government monitors, according to 2015 results published by the nonprofit Environmental Integrity Project.

Even small increases in exposure to particle pollution within a city can significantly increase the progression of heart disease, even if the levels remain below federal standards, according to Joel Kaufman, a physician-epidemiologist at the University of Washington and editor-in-chief of Environmental Health Perspectives.

The EPA acknowledged that community monitoring programs had been useful in identifying hot spots. But the EPA added that the low-cost monitors sometimes used by community groups have cheaper components and can have higher error rates than government monitors, and may not operate as well in harsh climates.

Government monitors also have problems. EPA performance evaluations have identified a long-running trend of imprecision and a bias toward undercounting pollution levels, according to the agency's 2015 audit report. The audit covered about 1,000 government fine particulate matter monitoring sites, operated by nearly 100 environmental agencies. It found that 46% of the agencies had monitors that failed to meet the EPA's standard for precision and 44% of agencies had devices that failed the bias standard.

In a statement, the EPA said the network's accuracy has since improved, and that 21% of agencies had monitors that failed to meet its precision standard between 2017 and 2019 and 39% had monitors that failed its bias goal.

TOSSING RESULTS TO HELP INDUSTRY

When EPA monitors capture pollution that exceeds regulatory limits, the EPA sometimes throws out those results for the purposes of its air-quality assessments - clearing the way for industrial development.

Trump's economic agenda has included fast-tracking the re-designation of areas of the country that are out of compliance with pollution standards, sometimes redrawing maps to exclude certain air monitors. Nationally, the administration has re-designated 54 out-of-compliance areas since 2017. Some of its decisions have been thrown out by the courts as arbitrary.

In Sheboygan, Wisconsin, for example, a court rejected the EPA exclusion this year of a monitor recording high ozone levels near the shoreline of Lake Michigan so that part of the surrounding county could be reclassified as complying with federal clean air standards. The EPA justified the move by arguing the monitor was unduly influenced by pollution coming from elsewhere via "lake breezes."

The EPA said the re-designations reflect greater progress toward cleaner air.

Industry can also benefit from the placement of monitors - a process that polluting companies can influence, said Corbett Grainger, a University of Madison-Wisconsin environmental economics professor who led a study of monitor site selection.

The EPA provides guidance on where monitors are placed, but state regulators have wide discretion. The Wisconsin researchers found that state regulators in counties that are close to exceeding pollution standards often place monitors in cleaner areas when they have the option, a conclusion based on a study of years of EPA monitor data and pollution estimates from satellites.

"We found that, on average, newly sited monitors are placed in relatively clean areas," said Grainger, the Wisconsin environmental economist. The positioning, he said, suggests that local regulators strategically avoid pollution hot spots.

The EPA declined to comment on the study.

In 2015 and 2016, Missouri regulators allowed St. Louis-based utility Ameren Corp to select sites to install four sulfur dioxide (SO2) monitors around its Labadie coal plant. The plant is ranked by the EPA as the second largest SO2 polluter in the country. The EPA and state regulators signed off on the monitoring sites as

accurately capturing the plant's pollution - over the objections of environmental groups that argued the locations would prevent monitors from picking up the coal plant's peak SO2 concentrations.

Ameren told state regulators it followed EPA guidelines in locating the monitors. The company declined to comment for this story.

The Missouri Department of Natural Resources said choosing the locations was a collaborative effort with the company and the EPA, and that regulators reviewed and verified Ameren's analysis of the sites. "It's not unusual for facilities to submit their own analysis," the department said.

In August, the EPA told Missouri's governor that it plans to move ahead with redesignating the area around Labadie as in compliance with pollution standards.

But pollution from the plant travels far beyond the surrounding area, said Chinkin, the atmospheric scientist. Based on a computer simulation, he said in court testimony in 2019 that Labadie's SO2 output converts to fine particulate matter because of the heat and humidity during summer in St. Louis.

The result, Chinkin testified, is particulate pollution that extends across the entire eastern half of the United States. The worst impacts, he said in a phone interview, can be seen "hundreds of miles beyond Missouri." (Reporting by Tim McLaughlin, Laila Kearney and Laura Sanicola Editing by Richard Valdmanis and Brian Thevenot)

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Aftermarket truck mods pollute as much as 9 million extra pickups

https://arstechnica.com/cars/2020/12/truck-emissions-mods-pollute-more-than-dieselgate-epa-says/ The EPA estimates 550,000 medium pickup trucks have disabled emissions controls. JONATHAN M. GITLIN - 12/1/2020, 11:06 AM

I remember the first time someone rolled coal on me. It was 2006, and I was driving to work at the University of Kentucky. It was a bright, sunny day in Lexington, and I had the roof down and was stopped in traffic behind a large pickup truck with decidedly non-standard exhaust pipes exiting straight up behind the cab. Whoever was driving the pickup evidently noticed the Miata in his mirror and enveloped me in a thick cloud of soot when the lights changed.

As automotive subcultures go, intentionally modifying your truck's diesel engine to make extra pollution is one of the more antisocial ones out there. According to the US Environmental Protection Agency, diesel trucks with disabled emissions controls are far more widespread than you might think and emit more pollution than the diesel engines that got Volkswagen such hefty fines.

In 2016, Volkswagen agreed to a <u>pair of court settlements</u> totaling <u>nearly \$16 billion</u> after it was caught selling diesel vehicles fitted with emissions defeat devices. In total, the VW scandal affected more than half a million cars and SUVs sold in the US, which produced up to 40 times the legal limit of nitrogen oxides (NOx) when in daily operation.

According to the EPA's Air Enforcement Division, the use of aftermarket emissions defeat devices by diesel truck owners rivals that problem. In a report first obtained by The New York Times, it estimates that 550,000 medium trucks have had their emissions systems tampered with over the last decade—fully 15 percent of the diesel trucks on US roads.

In fact, the EPA analysis is limited to <u>class 2b and class 3 diesel pickups</u>—trucks with gross vehicle weights between 8,501 to 14,000lbs (3,856 to 6.350kg)—based on data obtained from the agency's civil enforcement investigations involving tampering that happened between 2009 and 2020. And specifically, the EPA says it's only counting tampering where all of a truck's emissions controls are removed, as opposed to mods that leave "emissions controls hardware intact and operational."

They sure are dirty. The EPA report says that 570,000 tons of excess NOx and 5,000 tons of excess diesel particulates are the result over the course of these trucks' lifetimes. Or to put it another way, "due to their severe excess NOx emissions, these trucks have an air quality impact equivalent to adding more than 9 million additional (compliant, non-tampered) diesel pickup trucks to our roads."

And that's bad, because it's abundantly clear that higher levels of these airborne pollutants kill people.

As you might expect, the practice of removing emissions controls from one's truck is a more prevalent practice in states without regular vehicle inspections. North Dakota leads the way with an estimated 18.6 percent of diesel trucks having been tampered with; by contrast the agency estimates the incidence of tampering in California to be 1.8 percent.

However, North Dakota is a sparsely populated state. And while estimated rates of diesel truck tampering are lower elsewhere, Texas leads the way numerically with nearly 65,000 tampered trucks, according to the study.

U.S. fuel industry frazzled as Trump EPA misses 2021 biofuel volumes deadline

https://financialpost.com/pmn/business-pmn/u-s-fuel-industry-frazzled-as-trump-epa-misses-2021-biofuel-volumes-deadline-2

Reuters Stephanie Kelly Publishing date:

Dec 01, 2020 • • 2 minute read

NEW YORK — The U.S. Environmental Protection Agency was set to miss a deadline on Monday to announce how much renewable fuel the nation's refiners must blend into their fuel mix next year, raising uncertainty in the fuel market and prompting one biofuel association to threaten to take the agency to court.

Under federal law, the EPA must finalize its decision on the annual biofuel blending volume requirements it imposes on the refining industry for the next year by Nov. 30. The agency did not respond to requests for comment.

"At this point, it likely makes more sense to let the new administration handle the 2021 RVO (Renewable Volume Obligations) rulemaking process entirely," said Geoff Cooper, the president of the Renewable Fuels Association, one of the nation's biggest biofuel industry groups.

Growth Energy, another U.S. biofuel industry association, said it intends to file a lawsuit to force the Trump administration's EPA to act "immediately."

The American Fuel and Petrochemical Manufacturers, a top refinery industry association, said it hoped the EPA will "soon provide certainty" to its members.

Under the U.S. Renewable Fuel Standard, refiners must blend billions of gallons of ethanol and other biofuels into their fuel pool, or buy credits from those that do - a policy that has created a huge market for corn-based ethanol but which the oil industry loathes.

While the Trump administration has mainly hit its deadlines for setting specific biofuel volumes mandates under the RFS, the process this year has been complicated by the economic fallout of the coronavirus pandemic.

Slumping fuel consumption has led refiners to argue for lower volume mandates to match demand, and biofuels producers to argue that doing so would only hurt them more.

The EPA has also left unaddressed a number of other questions that will likely need to be dealt with by the incoming Biden administration, including requests from oil industry advocates for the EPA to ease 2020 compliance because of the impact of the pandemic, and requests from the biofuel industry for the agency to ditch a waiver program it argued has illegally eroded demand for ethanol.

The oil industry says that the waivers do not hurt ethanol demand. (Reporting by Stephanie Kelly in New York Editing by Matthew Lewis)

Toxic 'forever chemicals' found in pesticide used on millions of Mass. acres when spraying for mosquitos https://www.bostonglobe.com/2020/12/01/metro/toxic-forever-chemicals-found-pesticide-used-millions-mass-acres-when-spraying-mosquitos/

By David Abel Globe Staff, Updated December 1, 2020, 18 minutes ago

For two decades, state environmental officials have used a controversial pesticide to kill mosquitos in Massachusetts, spraying millions of acres from the air and ground to reduce the spread of Eastern equine encephalitis.

Now, after years of criticism from environmental advocates who have long raised health concerns about the expensive treatment known as Anvil 10+10, the pesticide has been found to also contain an array of toxic compounds known as PFAS. The so-called "forever chemicals," which are found in a range of commercial products and never fully degrade, have been linked to cancer, low infant birth weights, and a range of diseases.

The amount of some of the chemicals found in the pesticide — which has been used in at least 25 other states — exceeds recent safety limits imposed by the state for drinking water. Given the amount of pesticide used, and how widely it has been dispersed over the years, specialists say it's likely that the chemicals have leached into groundwater and other water sources.

The recent findings came from a series of tests conducted this fall by the state Department of Environmental Protection, which began examining Anvil after <u>testing by</u> an advocacy group found similarly elevated levels of the chemicals in the pesticide.

Environmental officials said they're trying to determine whether it's safe to continue using the pesticide, which federal regulators have found includes other <u>potential carcinogens</u>. Most of the <u>spraying</u> has been done in the southeastern part of the state, where EEE, a rare but deadly mosquito-borne disease, has been most prevalent.

"We're taking this very seriously," said Dan Sieger, the state's undersecretary for environmental affairs. "When we figure out the source of the contamination . . . we'll make a decision."

Officials at Clarke, the Illinois company that produces Anvil, said that no PFAS chemicals are used in the pesticide, but acknowledged the possibility they could have been introduced through manufacturing or packaging.

Mark Smith, director of the DEP's office of research and standards, said he has been studying how the chemicals may have been dispersed and whether they present a health danger.

"The reason we're taking this so seriously, and why we're concerned, is that these compounds are so persistent in the environment," he said.

Concerns about PFAS, manmade chemicals invented in the 1940s as water repellants and flame retardants, have risen as a growing body of research links long-term exposure to an array of health problems. In response, an increasing number of states have enacted stricter limits on the amount allowed in drinking water.

So far, Smith's assessments suggest the PFAS in the pesticide haven't "presented significant risk to water supplies, because of the dilution factor," he said. When the chemicals are dispersed, they decline in concentration.

"I've done some worst-case calculations to determine what levels might land in a drinking water reservoir, and the results wouldn't be measurable," he said.

But he acknowledged there are unknowns, given that the pesticide has been used in large amounts for the past 20 years and the PFAS do not break down, accumulating over time.

Since September, the department has tested nine samples from five separate containers of Anvil and detected eight different compounds of PFAS. Of those, three compounds substantially exceeded the state's new limits, in some cases by more than sevenfold. Other unregulated PFAS chemicals were detected in even greater amounts.

Officials at the US Environmental Protection Agency, which has been criticized for delaying new standards to reduce PFAS exposure, said they were looking into the findings and plan to conduct their own tests of Anvil.

"There are significant unanswered questions about the data currently available," said Dave Deegan, a spokesman for the EPA's offices in New England, adding that the agency is working on "an analytical method" to detect PFAS in pesticides. "EPA will continue to work closely with and support the state on this issue. Aggressively addressing PFAS continues to be an important, active, and ongoing priority for EPA."

Last year, Massachusetts spent more than \$5 million to spray Anvil from helicopters and airplanes, dousing more than 2 million acres over 26 days in 100 municipalities. It was the state's most deadly outbreak of EEE since the 1950s, with six deaths among the 12 people who contracted the disease.

This year, with drought conditions reducing the mosquito population, the state sprayed 200,000 acres in 23 municipalities. There have been no deaths this year.

State officials did not provide information about how much of the pesticide was sprayed on the ground.

Officials at Clarke defended their product and said they were awaiting guidance from regulators about how best to conduct their own tests.

"Anvil has played an important role in preserving public health for three decades," said Karen Larson, the company's vice president of government affairs. "Confidence in these products is critical to achieve public health goals, and we will continue to work closely with the EPA to conduct our own testing."

Larson said it was unclear why the company's pesticide contained PFAS.

"When this was first brought to our attention, we conducted an internal inquiry of our manufacturing and supply chain to ensure that PFAS was not an ingredient in the production, manufacturing, or distribution of either the active or inactive ingredients of Anvil," she said.

"No PFAS ingredients are used in the formulation of Anvil, nor in the production of any source material in Anvil. PFAS components are not added at any point in the production of Anvil," she added.

Some environmental advocates were skeptical of the company's claims, noting that PFAS have been <u>used</u> in other pesticides and can extend their shelf life and help make them easier to disperse.

In a <u>letter</u> to DEP officials, Public Employees for Environmental Responsibility, a Washington advocacy group, noted its own <u>tests</u> of Anvil found the pesticide contained 250 parts per trillion of one of the chemicals regulated by the state — more than 22 times the new limit for drinking water. They found other unregulated PFAS compounds in even greater amounts.

While Clarke doesn't list the chemicals as active ingredients of Anvil, they could be inert ingredients, they said.

"Pesticide manufacturers usually withhold information from the public about inert ingredients as 'trade secrets' or 'proprietary' information," wrote Tim Whitehouse, executive director of PEER. "Therefore, it is conceivable that PFAS are added deliberately to pesticide formulations."

Larson dismissed the possibility that PFAS were inert ingredients.

"We have reached out to the manufacturers of the active and inert ingredients, and they also confirm that PFAS is not an ingredient in the production, manufacturing, or distribution of the product's ingredients," she said.

Whitehouse noted an increasing number of municipalities in Massachusetts have detected elevated levels of PFAS in their drinking water, and that many of them are now struggling to pay for the expensive equipment designed to filter out the toxic chemicals.

As of this month, 32 of 164 public water systems tested over the past year had more PFAS in their drinking water than allowed, state officials said.

"While it is likely some of the contamination is coming from wastewater treatment plants and consumer goods, it is also possible that some of the widespread contamination is coming from Massachusetts' aerial and ground-based spraying of Anvil," wrote Whitehouse, who urged the state to stop using the pesticide or any others that contains PFAS.

Some scientists and lawmakers echoed his concerns. Laurel Schaider, a research scientist at the Silent Spring Institute in Newton, which has received large grants from the federal government to study PFAS, said she was "very concerned" about the state's findings.

She noted that some of the chemicals the state detected in Anvil are newer "short-chain" PFAS compounds, which she described as "even more mobile in the environment and more difficult to remove from drinking water."

"We already have a public health crisis in this country with PFAS contaminating drinking water, and we don't want to make the situation worse," Schaider said.

State Senator Jo Comerford, a Northampton Democrat who chairs the Legislature's Joint Committee on Public Health and is an observer on the state's newly created Mosquito Task Force, called the state's findings "significantly concerning."

With the state expecting a bad EEE season next summer — the disease usually spikes in three-year cycles — she said environmental officials should issue a moratorium on Anvil and take steps to protect the public without using such toxic chemicals.

"These findings should be a wake-up call for all of us," Comerford said.

US EPA finds that glyphosate may affect endangered species

https://chemweek.com/CW/Document/115739/US-EPA-finds-that-glyphosate-may-affect-endangered-species 14:09 PM | December 1, 2020 | Sanjiv Rana

A new draft biological evaluation from the US EPA finds that the herbicide, glyphosate, "is likely to adversely affect a significant percent of endangered species and critical habitats". The draft assessment, which has been issued for a 60-day public comment period, is the next step in the EPA's ongoing regulatory review of the active ingredient. In January, the EPA reaffirmed its view that glyphosate is not a carcinogen and finalised its decision to reregister the ai. That decision was immediately challenged by lawsuits from environmentalist and farmworker groups.

Biological evaluations are the beginning of the EPA's consultation process under the Endangered Species Act, where the Agency determines whether a pesticide may affect one or more individuals of a listed species and their designated critical habitats. The EPA will finalise the glyphosate evaluation after the public comment period. If it decides that the ai may affect a listed species or its critical habitat, it will consult with the US Fish and Wildlife Service and the National Marine Fisheries Service. Their conclusions could lead to proposals for either generic or geographically specific use restrictions on the herbicide if these are considered necessary to prevent harm to listed species or habits.

Glyphosate is used on about 298 million acres (121 million ha) of agricultural crop land every year in the US, and is effective and affordable, the EPA notes.

Write this down: EPA laid out an interim plan for addressing discharges of PFAS

https://www.politico.com/newsletters/morning-energy/2020/12/01/write-this-down-791953
By KELSEY TAMBORRINO
With help from Alex Guillén
12/01/2020 10:00 AM EST

EPA laid out an interim plan for addressing discharges of PFAS, in what could be a first step in slowing the flow of the toxic chemicals into drinking water sources.

EPA RELEASES INTERIM PFAS PLAN: The agency is recommending that regulators require many factories, wastewater treatment plants and other facilities to monitor wastewater for toxic "forever chemicals," <u>Pro's Annie Snider reports. In a memo</u> sent to regional administrators last week, EPA water chief David Ross laid out an "interim strategy" to address discharges of PFAS that included a call for permit writers to "consider and incorporate" practices to control discharges of PFAS "when appropriate."

The plan marks a first step toward stanching the chemicals' flow into rivers and streams that serve as drinking water sources. Much of EPA's regulatory work on PFAS so far has focused on filtering the toxic contaminants from drinking water rather than cutting off the flow of additional pollution from the source.

The response: Scott Faber of the Environmental Working Group called the announcement "an insult to the millions of Americans who are drinking water contaminated with PFAS," in a statement. He said EPA should be issuing "tough, mandatory standards to regulate PFAS discharges from thousands of industry facilities, not 'encouraging' industry and regulators to 'consider' whether to limit releases of toxic chemicals building up in the blood of every American."

OSTP STAFFER HEADS TO CLIMATE REPORT GROUP: Kim Doster, a scheduler for White House Office of Science and Technology Policy Director Kelvin Droegemeier, has taken a top job at the U.S. Global Change Research Program, which creates the National Climate Assessment every few years, according to her LinkedIn profile. <u>Doster, who lists her new position at USGCRP as senior policy adviser</u>, is at least the third Trump official to be detailed to a key role at the program in the final months of the administration, after climate skeptic David Legates and NOAA chief scientist Ryan Maue took key oversight roles.

#ThisTown: <u>Doster's father is Tim Clark, a longtime California GOP strategist</u> who ran President Donald Trump's 2016 primary campaign there and later his southwest operations in the general. He came on as a White House liaison at the Department of Health and Human Services and then as a policy adviser to Trump and <u>now</u> works as chief communications officer for the U.S. Patent and Trademark Office.